



Ontario Energy Board



IN THE MATTER OF THE ONTARIO ENERGY BOARD ACT

AND

IN THE MATTER OF AN APPLICATION BY

UNION GAS LIMITED

FOR LEAVE TO CONSTRUCT A PIPELINE IN THE TOWN OF FLAMBOROUGH IN THE REGIONAL MUNICIPALITY OF HAMILTON-WENTWORTH

E.B.L.O. 234 PHASE I

PHASE I - DECISION WITH REASONS

Pour des renseignements en français, veuillez communiquer avec la Commission de l'énergie de l'Ontario.

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(La Commission accepte les appels

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IN THE MATTER OF the Ontario Energy Board Act, R.S.O. 1980, Chapter 332, and in particular, Sections 46 and 48 thereof;

AND IN THE MATTER OF an Application by Union Gas Limited for leave to construct a natural gas pipeline and ancillary facilities in the Townships of Lobo, London and West Nissouri, in the County of Middlesex; in the Township of Zorra, in the County of Oxford; in the Town of Flamborough in the Regional Municipality of Hamilton-Wentworth; and in the Town of Milton in the Regional Municipality of Halton.

BEFORE:

O.J. Cook Presiding Member

C.A. Wolf Jr. Member

V.W. Bielski, Q.C. Member

March 1, 1990

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PHASE I - DECISION WITH REASONS

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1.0.0 INTRODUCTION

1.1.0 THE DAWN-TRAFALGAR SYSTEM

- 1.1.1 Union Gas Limited ("Union" or "the Applicant")
 owns and operates the Dawn-Trafalgar System
 ("the System") which transports natural gas
 between Union's Dawn Compressor Station ("Dawn")
 at its west end near Sarnia, and its Trafalgar
 Compressor Station ("Trafalgar") in Oakville at
 its east end. The System is an integral part
 of Union's underground storage, transmission
 and distribution system.
- 1.1.2 During the summer months, the flow of gas on the System is generally in a westerly direction from Oakville to Dawn. Union's Firm Service ("FS") deliveries from TransCanada PipeLines Limited ("TCPL"), during the summer, are used to supply Union's in-franchise customers and replenish Union's inventory of stored gas. Gas to be injected into storage is also shipped

westward for The Consumers' Gas Company Ltd. ("Consumers Gas"), Gaz Metropolitain, inc. ("GMi"), ICG Utilities (Ontario) Ltd ("ICG") and The Kingston Public Utilities Commission ("KPUC"). Most of Union's Firm Service Tendered ("FST") deliveries from TCPL are received at Dawn and thus do not require westerly transportation on the System.

- 1.1.3 During the winter months, the physical flow changes to an easterly direction from Dawn to Oakville. FST gas delivered by TCPL at Dawn plus gas from storage is moved easterly from Dawn to serve Union's in-franchise market needs and its transportation customers' ("M12 customers") demands. Union's FS deliveries from TCPL are received at Oakville and may be used to meet part of Union's obligations to its storage and transportation customers.
- 1.1.4 Union recently constructed a transmission line ("the Kirkwall Line") from its Kirkwall Valve Site ("Kirkwall") on the System to TCPL's Gate Station No. 3 south of Hamilton. Union reported that this line was sold to TCPL on January 20, 1990.
- 1.1.5 The System currently comprises three parallel pipelines. A 26 inch diameter pipeline was constructed in 1957. A 34 inch diameter

pipeline was constructed in sections between 1964 and 1974. Both of these pipelines stretch from Dawn to Union's Lisgar Valve Station ("Lisgar"). A 42 inch diameter pipeline was constructed over the period from 1975 to 1989. This latter pipeline extends from Dawn to Kirkwall. Compression facilities are located at Trafalgar and Dawn, and the Lobo, Bright and Parkway Compressor Stations ("Lobo", "Bright" and "Parkway" respectively).

1.2.0 THE APPLICATION

1.2.1 In its application dated July 24, 1989 ("the Application"), Union applied to the Ontario Energy Board ("the Board"), pursuant to Sections 46 and 48 of the Ontario Energy Board Act ("the Act"), for an Order granting leave to construct:

48.5 kilometres of 48 inch diameter (1219 mm) pipeline from its existing Lobo Compressor Station in Lot 14, Concession VII, in the Township of Lobo through the Townships of London and West Nissouri, all in the County to its Middlesex. existing Beachville Transmission Station in Lot 20, Concession V, in the Township of Zorra, in the County of Oxford together with three (3) proposed valving facilities to be located at the London Valve Site ("London") in Lot 9, Concession IX, in the Township of London, in the County of

Middlesex, at the St. Mary's Valve Site ("St. Mary's") in Lot 20, Concession VII, in the Township of West Nissouri, in the County of Middlesex, and at the Beachville Transmission Station ("Beachville") in Lot 20, Concession V, in the Township of Zorra, in the County of Oxford, and hereinafter referred to as the 'Lobo-Beachville Loop';

10.3 kilometres of 48 inch diameter pipeline from its existing Kirkwall Valve Site in Lot 25, Concession VII, in the Town of Flamborough to its existing Hamilton Valve Site in Lot 13, Concession IX, in the Town of Flamborough, all in the Regional Municipality of Hamilton-Wentworth together with one (1) proposed valving facility to be located at the Hamilton Valve Site in Lot 13, Concession IX, in the Town of Flamborough, in the Regional Municipality of Hamilton-Wentworth, and hereinafter referred to as the 'Kirkwall-Hamilton Loop';

11.0 kilometres of 48 inch diameter pipeline from the proposed Milton Tie-In in Lot 10, Concession I, in the Town of Milton to its existing Parkway Compressor Station in Lot 9, Concession IX, in the Town of Milton, all in the Regional Municipality of Halton together with one (1) proposed valving facility to be located at the Milton Gate Station in Lot 9, Concession III, in the Town of Milton, in the Regional Municipality of Halton, and hereinafter referred to as the 'Milton-Parkway Loop'.

Also, additional compression and measurement facilities were claimed to be required in order to provide sufficient transportation capacity to meet Union's forecast requirements for its fiscal year ending March 31, 1991, (fiscal 1991). These facilities include a new 37,100 horsepower compressor at Bright, "re-aero" assemblies at Lobo, Bright and Parkway ("the 1991 compression") and measurement facilities at Kirkwall.



2.0.0 THE PREHEARING CONFERENCE

2.1.0. INTRODUCTION

2.1.1 A prehearing conference was held in London on October 25, 1989 to hear motions by the Middlesex-Oxford Landowners Committee and Association ("MOLCA"), and by Mr. Ian Goudy, a landowner intervenor, representing himself and certain other named landowners; and to establish a list of the issues to be dealt with in the main leave to construct hearing under Board File No. E.B.L.O. 234.

2.2.0 THE MOLCA MOTION

- 2.2.1 A motion was filed by MOLCA requesting a Board order:
 - (a) requiring service of the Notice of Application and Notice of Hearing in this proceeding upon additional parties;

- (b) staying the proceeding until the Board is satisfied that the Applicant has complied with paragraph 1 of Procedural Order No. 1;
- (c) adjourning the prehearing conference scheduled for October 25, 1989;
- (d) extending the date for the filing of written interrogatories by intervenors to a date beyond October 25, 1989;
- (e) extending the date for the filing of intervenor evidence, with the Board agreeing to accept oral evidence; and
- (f) adjourning the hearing of the Application to a date beyond November 22, 1989.
- 2.2.2 Mr. G. Sinker, Counsel to MOLCA, subsequently specified that a stay of the scheduled proceedings from November 22, 1989 to March 1, 1990 would allow sufficient time for MOLCA to prepare its intervention.
- 2.2.3 Mr. B. Kellock, Counsel to Union, opposed the motion and proposed that the Board consider the Application as being comprised of three segments to be dealt with in two phases. The applied-for Kirkwall-Hamilton Loop and the Milton-Parkway Loop would be dealt with first, separate from a second phase dealing with the applied-for

Lobo-Beachville Loop. As suggested, the first phase of the hearing should begin, as scheduled, on November 22, 1989, and that the Board issue a decision on the first phase prior to hearing the issues surrounding the proposed Lobo-Beachville Loop early in 1990.

The Board's Ruling on MOLCA's Motions

2.2.4 Upon hearing all submissions and arguments on MOLCA's motions, the Board made the following oral ruling:

With regard to the matter of service, the Board finds that Union has complied with the Board's letter of direction, dated August 30, 1989. The Board denies Mr. Sinker's motion that service of the Notice of Application and the Notice of Hearing should be broadened ...

The Board reserves its decision on the matter of Union's compliance with Procedural Order No. 1 and will proceed to hear evidence before issuing its decision on this matter ...

The Board denies the motion to adjourn today's proceeding, and will proceed with the development of the Issues List.

With regard to the need to adjourn the November 22 hearing, and to extend the filing dates, the Board reserves its decision on this matter of adjournment and extensions until the (Intervenor) Funding Panel has rendered its decision.

At that time, the Board will also rule on whether the hearing should proceed in two phases as proposed by Mr. Kellock. In order that the proceeding will not be unduly delayed, in the event that the Board does endorse Mr. Kellock's proposal, the Board now extends the deadline for the filing of interrogatories until November 2 and instructs the parties and Union to proceed with the interrogatory process as if Mr. Kellock's proposal had been accepted.

2.3.0 THE MOTION BY MR. I. GOUDY, et al.

2.3.1 Mr. Ian Goudy filed a motion for an adjournment of the scheduled November 22, 1989 commencement of the main hearing to a date early in 1990. Mr. Goudy argued that it would then not be necessary for affected farmers to interrupt their harvesting in order to participate in the hearing. Mr. Goudy also submitted that additional time was required for the landowners to review the prefiled evidence and prepare their case.

The Board's Ruling on the Goudy et al. Motion

2.3.2 After hearing all submissions on Mr. Goudy's motion, the Board issued the following oral ruling:

Since the effects of Mr. Goudy's motion and that of Mr. Sinker are interrelated, the Board reserves its decision on Mr. Goudy's motion until the Intervenor Funding Panel has rendered its decision.

2.4.0 THE BOARD'S DECISION ON MOTIONS

- On November 6, 1989, subsequent to the hearing 2.4.1 of applications for intervenor funding under the Intervenor Funding Project Act 1989 ("the IFPA"), but prior to the issuance of the Intervenor Funding Panel's decision, the Board issued its written Decision on Motions under Board File No. E.B.L.O. 234. This Decision denied the outstanding motions postponement of the scheduled November 22, 1989 start of the hearing; the extension of the filing dates; and the acceptance of oral, rather than written, prefiled evidence. In that Decision, the Board accepted Union's proposal to divide the main hearing into two phases.
- 2.4.2 The Board's Procedural Order No. 2, issued on November 9, 1989, gave effect to the findings in the Decision on Motions. This Procedural Order set the schedule for additional interrogatories and for the filing of evidence for Phase II of the hearing; called for the commencement of Phase I of the main leave to

construct hearing in Toronto on November 22, 1989; and scheduled Phase II to begin on February 6, 1990, preferably in London.

2.5.0 THE ISSUES LIST

- 2.5.1 In an effort to help focus and expedite the prehearing conference, Board Staff prepared and distributed a proposed issues list for consideration by all the parties.
- 2.5.2 Dr. B. Clarke, on behalf of certain named landowners, requested the inclusion of two new issues relating to the testing of the Application under Sections 7 and 26 of the Constitution Act, 1982.
- 2.5.3 The Board ruled that the addition of the issues regarding the constitutional aspects, as proposed by Dr. Clarke, would not be helpful to the Board in its deliberations on the Application.
- 2.5.4 Union requested changes to the wording of two issues as proposed by Board Staff. The changes were accepted by all parties, and were made to clarify the issues.

2.5.5 The Board approved the Issues List as modified to accommodate Union's concerns. The final approved Issues List is appended to this Decision as Appendix A.



3.0.0. THE HEARING

3.1.0 INTRODUCTION

As called for in the Board's Procedural Order 3.1.1 No. 2, and subsequent to the extension of the time for filing and replying to interrogatories, the Phase I hearing was held to deal initially with the proposed Kirkwall-Hamilton and Milton-Parkway Loops of 48 inch pipe that would extend the existing 42 inch pipeline on the System. The Phase I hearing, therefore, did not deal with the applied-for Lobo-Beachville Loop, nor did it deal with the broader issues of the impacts of a fourth pipeline, or route alternatives to the Dawn-Trafalgar corridor. As prescribed in Procedural Order No. 2, these latter issues were reserved for consideration in Phase II of the proceedings.

- The Phase I hearing commenced on November 22, 1989, and was adjourned sine die on November 28, 1989. The hearing reconvened in London on February 6, 1990 and was concluded on the same day.
- 3.1.3 Arguments by all parties were submitted prior to the November 28, 1989 adjournment. All arguments, with the exception of those of TCPL, CNG Transmission Corporation ("CNG"), and Makerry Holdings Inc. ("Makerry") were made orally. None of the parties submitted further arguments at the conclusion of the reconvened Phase I hearing on February 6, 1990.
- 3.1.4 Copies of the verbatim transcript of the proceeding and all exhibits are available to the public for review in the Board's Offices.

Appearances

3.1.5 The following appearances were registered during the Prehearing Conference and the Phase I hearing:

Burton Kellock, Q.C. for Union Larry Fedchun

Ian Blue, Q.C. for Board Staff
Ian Dick

Peter Atkinson for Consumers Gas

James Smellie David Wilson for CNG

Michael Peterson

for GMi

Neil Patterson Jill Schatz for TCPL

Howard Wolch

for Morris Waxman,

landowner

John Melnik

for the Kirkwall-Hamilton Landowners Committee. ("the Kirkwall-Hamilton

Committee")

George Sinker

for MOLCA, Makerry, Twin
Elm Estates Ltd.; Arva
Heights Limited; Ron Loft;
James W., Joel G., and
J. Everett Robson; and

Clare W. and Wendy Bloomfield

Ian Goudy

for himself and his father, landowners

Hugh Fletcher

for the Middlesex County Federation of Agriculture

Keith Campbell

for himself and Lorna Campbell, landowners

Albert Rutherford

for the Oxford County Federation of Agriculture

Donald Woolcott

for a group of landowners

between Bright and

Beachville

B. Clarke Ph.D.

for Wolf and Elvira

Schweitzer, and Tony and

Jeanette Kocemba

P. Brooks

for the Foodland - Hydro

Committee

John Droog

for Emmy Droog, landowner

Witnesses

3.1.6 The following employee witnesses were called by Union:

William G. James Manager, Facilities Planning

Michael J. Whalen Intermediate

Transmission Planning

Engineer

J. Patricia Elliott Manager, Rate Design and Cost of Service

Randall E. Aiken Senior Economist

Roger M. Rossi Manager, Consulting

Services

Gary D. Black Manager, Storage and

Transportation Services

Geoff W. Connors Project Manager,

Pipeline Engineering

Robert R. Bryant Manager, Pipeline Engineering, Gas

Supply Engineering

Roger S. Piett Project Manager,

Pipeline Engineering

Jerry L. Studnicka Manager, Lands

Tony O. Vadlja Senior Environmental

Planner, Gas Supply

Engineering

Brian P. Gabel Manager, Financial

Planning

3.1.7 Union also called:

Peter G. Prier

Manager, Environmental Assessment Section, Ecological Services for Planning Ltd.

Cameron M. Kitchen, PhD. President, Ecoplans Ltd.

John B. Molyneaux President, J.B.
Molyneaux Limited

Bruce A.J. Herdman Jr. Supervisor, Export Transportation, TCPL

3.1.8 The witnesses called by the intervenors were:

for Consumers Gas:

James D. Drysdale

Manager of Gas Supply Planning, Consumers Gas

for Makerry:

D. Barker, P.Eng.

President, D.R. Barker and Associates Ltd.

E. Fothergill, M.C.I.P.

President, Fothergill Planning and Development Planners

C.W. Bloomfield

for MOLCA:

landowner and member of MOLCA

Late Interventions

3.1.9 Mr. Morris Waxman and the Kirkwall-Hamilton Committee were granted late intervenor status at the start of the Phase I hearing, conditioned on their acceptance of the record of the proceedings as it existed, and with the understanding that they would not be eligible to apply for intervenor funding for these proceedings under the IFPA.

Motions

- 3.1.10 A motion to adjourn was made on November 22, 1989 on behalf of Mr. Morris Waxman. The basis for the motion was Mr. Waxman's claim that he had not been informed of the hearing sufficiently in advance to allow him to obtain and review the prefiled evidence, or to consider how he should proceed.
- 3.1.11 Union filed an affidavit of service which showed that notices had been served on I. Waxman and Sons Limited. Mr. Morris Waxman is a joint tenant with respect to this property.
- 3.1.12 At the start of the Phase I hearing, CNG filed a motion for the Board to order Union to provide complete replies to certain interrogatories which had been put to Union by CNG. These,

essentially unanswered interrogatories, requested details of the up-stream and downstream arrangements which supported the planned flow of gas by St. Clair Pipelines Ltd. ("St. Clair") on the System. This gas was described as being destined for use as co-generation fuel by customers of Empire State Pipelines ("Empire), in an area of New York State which is currently supplied by CNG.

The Board's Rulings

- 3.1.13 On November 22, 1989 the Board made its oral ruling which denied Mr. M. Waxman's motion for adjournment.
- 3.1.14 The Board reserved its decision on the CNG motion and proceeded to hear evidence on the need for the applied-for facilities. On November 24, 1989 the Board made the following oral ruling:

Keeping in mind Union's onus to establish need, the Board will not require, at this time, the production of the documentation sought by Mr. Smellie, but will require Union to file the final TCPL and St. Clair contracts as a prerequisite for approval of this phase of the application.

3.2.0 THE RECONVENED HEARING

- 3.2.1 On February 6, 1990 the Phase I hearing was reconvened in London. At that time, Union revised its timetable for the construction of the applied-for facilities. Union then claimed that only the Kirkwall-Hamilton Loop need be constructed during the 1990 construction season. The Phase I hearing was, thus, redirected to consider only the Kirkwall-Hamilton Loop.
- 3.2.2 Union's revised construction schedule called for installing both the Milton-Parkway and the Lobo-Beachville Loops during the 1991 construction season.

4.0.0 ISSUES

4.1.0 NEED

- 4.1.1 Union's application for additional facilities is based on forecast increases in demand by both in-franchise and M12 customers. According to Union's evidence, the need for the proposed facilities is driven by the incremental demands of its M12 customers.
- 4.1.2 A prefiled 18 year contract between Union and TCPL, dated May 3, 1989, and a 15 year agreement between Union and St. Clair, dated May 18, 1989, accounted for most of the incremental volumes initially cited to flow on the System, and thus were, at the outset, the underpinnings of the Application. Neither of these arrangements were firm in that both lacked guarantees

that capital costs would be recovered, and both were conditioned on obtaining further regulatory approvals.

- 4.1.3 Consumers Gas, during the initial part of the Phase I hearing, noted that Union could meet the transportation requirements of ICG and Consumers Gas for fiscal 1991, without any additional facilities being constructed.
- Prior to the adjournment of the Phase I hearing,
 Board Staff, Consumers Gas and CNG stated that
 Union had not presented evidence to support the
 need for the construction of the applied-for
 facilities in 1990. They argued that the Board
 should not grant approval of the proposed
 facilities until firm contracts establishing
 need had been filed.
- At that time, CNG and Consumers Gas further maintained that leave to construct should not be granted by the Board until all conditions precedent in the prefiled contract and agreements had been met. They argued that all parties should be given the opportunity to review the final contracts and that, once they had been filed, the Board should reconvene the Phase I hearing to afford this opportunity.

- 4.1.6 TCPL supported approval of the facilities applied for at the outset of the Phase I hearing, provided that all the conditions precedent in the prefiled transportation contract and agreements are met.
- 4.1.7 Union committed that facilities would not be constructed unless they were supported by firm contract demands. It proposed that the Board grant leave to construct, but condition the commencement of construction on the production of firm contracts, and on obtaining all required regulatory approvals.
- 4.1.8 GMi supported this position, but added that, should facilities be constructed without supporting contracts, any unrecovered demand charges should be paid by Union's shareholders.
- 4.1.9 Union also argued that an explicit demonstration of need was not a requirement of the Act, maintaining that Section 46 of the Act specifies public interest as the only criterion to be met. The Applicant further argued that public interest could require approval for facilities to meet anticipated but as yet unspecified needs, as well as for committed immediate needs.

- 4.1.10 On November 28, 1989, the Board re-stated the ruling it had earlier made on the CNG Motion, whereby the Board called for the filing of the final TCPL and St. Clair contracts as a prerequisite for approval of the facilities initially applied for in Phase I of the hearing. It was at this point that the Board adjourned the Phase I hearing sine die, pending Union's filing of the required final contracts.
- 4.1.11 For the reconvening of the Phase I hearing,
 Union filed the required final firm contracts.

 These contracts substantially revised Union's
 incremental transportation contract demand in
 the 1990/91 contract year.
- Amending Agreement No. 1 to the May 3, 1989 prefiled transportation service contract ("the Amending Agreement"), whereby the prefiled firm demand of "up to 14,694 10³m³ per day" beginning November 1, 1990 was reduced to a total firm contract demand of 14,128 10³m³ per day, to be phased in as follows:
 - (i) The contract demand effective November 1, 1990 shall be 5,155 103m3 per day; and
 - (ii) On November 1, 1991, the contract demand shall increase from $5,155 \cdot 10^3 \text{m}^3$ per day to $14,128 \cdot 10^3 \text{m}^3$ per day.

- 4.1.13 The prefiled and amended TCPL contract demands include 2,040 10³m³ per day which is to be renewed upon the termination of an earlier contract on October 31, 1990. Thus, TCPL's net contract demand increases over the previous year were 3,115 10³m³ per day in 1990/91 and 8,973 10³m³ per day in 1991/92.
- 4.1.14 All the conditions precedent in the prefiled TCPL contract continued to apply to contract demand increments of 3,115 10³m³ per day and 8,973 10³m³ per day. The conditions precedent which require National Energy Board ("NEB") approval do not apply to the 2,040 10³m³ per day contract demand, since this is not a new incremental demand on the System.
- Agreement was unclear with regard to the recovery of demand charges, Union filed a letter of understanding, dated February 2, 1990, wherein both Union and TCPL confirmed that the incremental demand charge to be paid for service under the contract shall be based on the contract demands of 5,155 and 14,128 10³ m³ per day as described in paragraph 4.1.12 above.
- 4.1.16 Union withdrew its May 18, 1989 prefiled letter agreement with St. Clair. Union stated that

the initial 4,450 10³m³ per day requirement, previously associated with St. Clair, would now be directly contracted by Empire's customers. The requirements to serve these customers were identified as "potential firm demand" beginning in 1991/92. These demands were, therefore, not included in Union's amended determination of firm peak day loads which were now cited as supporting the need for the proposed facilities.

- 4.1.17 Union prefiled an April 11, 1989 letter agreement with Consumers Gas which called for the transportation of 1,400 10³m³ per day for a 10 year period commencing November 1, 1990. Subsequent letter agreements with Consumers Gas, dated January 2 and 19, 1990, were filed specifying additional firm volumes of 1,420 10³m³ per day in the 1990/91 contract year and 850 10³m³ per day in the 1991/92 contract year.
- 4.1.18 A prefiled 15 year letter of agreement between ICG and Union called for an increment of 1,500 10³m³ per day of storage and transportation service commencing November 1, 1990. This contract demand was confirmed at the reconvened hearing.
- 4.1.19 A January 30, 1990 contract between Union and GMi, for the transportation of an additional

680 10³m³ per day effective November 1, 1991, was filed by Union on February 6, 1990. This additional demand did not bear upon the need for the construction of facilities in the 1990 construction season.

- 4.1.20 A January 16, 1990 letter agreement between Union and KPUC, increasing the latter's contract demand by 10 10 3 m per day for the 1990/91 contract year, was also filed on February 6, 1990.
- 4.1.21 Union indicated that all incremental storage and transportation volumes would be shipped on the System at the M12 rate.
- 4.1.22 The following table shows both the prefiled and revised 1990/91 contracted incremental demands by M12 customers.

Incremental Transportation
Contract Demand, 1990/91

		Prefiled 10 ³ m ³ /d	<u>l</u> :	Revised (Phase I) 103m3/d
Consumers ICG KPUC	Gas	1,400 1,500 10		2,820 1,500 10
TCPL St. Clair Total		12,654 4,450 20,014	<pre>(max)</pre>	3,115 7,445

4.1.23 At the conclusion of the reconvened Phase I hearing, Consumers Gas was satisfied that need had been confirmed, and it therefore then supported Phase I of the Application. There were no further challenges to Union's claimed Phase I contract demand from the other parties at the conclusion of the Phase I hearing.

- 4.1.24 The Board finds that, with the filing of the Amending Agreement and the letter agreements with ICG, Consumers Gas and KPUC, Union has sufficiently discharged its onus to present firm commitments to establish the need for the construction of the Kirkwall-Hamilton Loop.
- 4.1.25 The Board considers the Application to have been premature, in that it was filed in advance of obtaining firm commitments to establish need and assure payment of the demand charges required to recover the capital cost of the initially proposed facilities.
- 4.1.26 The Board cautions Union that, unless a convincing case can be presented for the approval of facilities on an anticipatory basis, future applications for leave to construct transmission facilities should be accompanied

by contractual commitments to substantiate need and the ability to recover costs.

4.2.0 SYSTEM DESIGN

- 4.2.1 Union chose to install 48 inch pipe, instead of 42 inch pipe, for the proposed loops east of Kirkwall, in order to forestall the need for additional pipelines in the future.
- 4.2.2 Union claimed that the revised contracts now indicated that only the Kirkwall-Hamilton Loop would need to be constructed to meet its 1990/91 contract demand. It, therefore, revised its system design to delay the construction of both the Milton-Parkway and Lobo-Beachville Loops, which are now the subjects of the Phase II hearing.
- 4.2.3 The thrust of the revised System design evidence, filed at the reconvening of the Phase I hearing, was that, based on fiscal 1990 requirements and the installation of loss of critical unit ("LCU") protection, the existing System is already at capacity. With the facilities now proposed, i.e. 1991 compression, LCU protection and only the Kirkwall-Hamilton Loop, the available system capacity on the peak day in fiscal 1991 was calculated to be 62,452 10³m³ per day, which included

deliveries at Kirkwall of 10,821 10 m per day.

4.2.4 The threshold for constructing the Kirkwall-Hamilton Loop in fiscal 1991 was thus cited as an increment of 1 10 3 m 3 per day because the existing system is operating at full capacity. Union claimed that, even without the TCPL incremental requirement, and without LCU protection, the Kirkwall-Hamilton Loop will be required for fiscal 1991.

LCU Protection

- According to Union, with continued demand growth on the System, the need for compressors has increased and their role is expected to become critical in fiscal 1991. It was claimed that there now is no room for forecast errors or unforeseen variances. Union also noted that advance capability is no longer being built by TCPL. Consequently, there is no excess capacity on the TCPL system upon which Union's M12 customers can rely for backup if Union's compressor units at Lobo or Bright were to fail.
- 4.2.6 Union claimed that, if the Bright compressor were to fail, and no provisions were made for this eventuality, pressure on the eastern end of the System would drop below the minimum required for deliveries to Consumers Gas.

- 4.2.7 Increasing reliance on the capacity of the System and a pressing need for more flexibility in the System to meet unforeseen gas supply emergency conditions, have now caused Union to consider providing LCU protection.
- 4.2.8 Union testified that it had assumed the existence of LCU protection when designing the applied-for facilities, and when calculating System capacity requirements.
- 4.2.9 Union contended that LCU protection is a matter of system design and operation and, as such, is outside the scope of leave to construct hearings. Union further argued that the Act does not require it to obtain Board approval for the installation of additional compression on the System.
- 4.2.10 However, Union stated that, in its E.B.R.O. 462 rates case, it would seek the Board's approval of the principle of LCU protection, and the Board's assurance that the associated capital costs would be eligible for inclusion in its rate base.
- 4.2.11 While recognizing that the decisions of one Panel of the Board are not binding on another Board Panel, Union maintained that the E.B.L.O. 234 Panel's acceptance of the existence of LCU

compression, as a component on the System in this hearing, would constitute an endorsement of the principle of LCU protection.

- 4.2.12 The Board accepts Union's claim that its current System will lack the capacity to meet the firm demands of M12 customers for the 1990/91 heating season.
- 4.2.13 Given Union's testimony that the facilities proposed in Phase I of these proceedings do not rely on the existence of LCU protection, the Board finds that the matter of LCU protection is outside the scope of this proceeding and, therefore, it makes no finding specific to acceptance or rejection of the principle of LCU protection.
- 4.2.14 The Board cautions Union that, should LCU protection be installed, future applications for leave to construct shall continue to be fully costed on a stand-alone basis. The Board notes Union's LCU design criterion that "No part of the capacity required for loss of a critical unit will be sold as firm transportation capacity".

4.3.0 ECONOMIC FEASIBILITY

- 4.3.1 At the reconvening of the Phase I hearing,
 Union filed a Stage 1 discounted cash flow
 analysis for the Kirkwall-Hamilton Loop. Cash
 flows were projected for 30 years and discounted
 at 13 percent, i.e. Union's incremental cost of
 capital. This analysis resulted in a profitability index of 0.993. A profitability index
 of less than one indicates that the cumulative
 net present value of cash flows is negative.
- 4.3.2 Cash inflows were based on the revised incremental volumes and revenues forecast for fiscal 1991. Volumes and revenues attributable to the project were established by customer classes in proportion to their use of the capacity that the new facilities would provide.
- 4.3.3 Cash outflows were identified as capital costs, operating and maintenance expenses and taxes.

 Union testified that all capital costs associated with the installation of LCU compression were excluded from its analyses.
- 4.3.4 With a profitability index of less than one,
 Union's Stage 1 analysis for the KirkwallHamilton Loop did not establish economic
 feasibility. As a result, Union submitted a

Stage 2 analysis which identified the present value of indirect benefits and costs over the 30 year life of the facilities.

- 4.3.5 In its Stage 2 analysis, Union quantified the value of energy cost savings, additional employment and taxes that would result from the installation of the proposed facilities. The present value of these Stage 2 benefits was divided by the present value of the forecast revenue deficiencies.
- Energy cost savings were the major benefit considered by Union in its Stage 2 analysis. These savings were attributed to all Union's forecast incremental in-franchise customers for fiscal 1991. The claimed value of these savings ranged from \$72,159,253 at a social discount rate of 10 percent, to \$43,334,365 at a social discount rate of 15 percent, and resulted in benefit/cost ratios of 9.37 and 5.47 respectively. Union made no energy cost savings claims with regard to the incremental volumes to be supplied to its M12 customers.
- 4.3.7 The Stage 1 and Stage 2 analyses, conducted by Union, were in accordance with the Board's directions in E.B.O. 134, concerning economic feasibility tests.

The Board's Findings

- 4.3.8 The Board accepts the methodology employed by Union in its analyses of the economics of the Kirkwall-Hamilton Loop.
- 4.3.9 Given that the Stage 2 benefit/cost ratio for the project exceeds one, the Board finds that Union has sufficiently demonstrated the economic feasibility of the Kirkwall-Hamilton Loop.
- 4.3.10 The Board accepts Union's uncontested testimony that the capacity expansion it is seeking in Phase I of these proceedings does not rely on the installation of LCU compression.

4.4.0 LANDOWNER CONCERNS

- 4.4.1 Union summarized the major issues of concern to the landowners as being matters of: compensation; proximity to the pipeline; safety; land restoration; and the need for, and location of, the proposed loop.
- 4.4.2 Union stated that it is offering an additional option to landowners which it had not provided in previous facility expansion programs. Union will offer to purchase lands required for the proposed pipeline, and for potential future

expansions, and lease these lands back for use by the former landowners.

- 4.4.3 Union stated that escalations in property values are driving it to purchase lands, rather than obtain easements, especially in highly speculative land development areas.
- 4.4.4 The Kirkwall-Hamilton Committee indicated that its landowners' concerns had been largely resolved. It recommended that its members accept Union's proposals.
- 4.4.5 Makerry argued that the route of the Kirkwall-Hamilton Loop, as proposed by Union, would travel through the heart of its proposed residential development, creating serious financial difficulty and disrupting its overall marketing plan. Makerry claimed that there is sufficient room along the southern boundary of its property to accommodate the pipeline.
- 4.4.6 Union took the position that the consequences of the final pipeline location would be reflected in the quantum of the compensation to be provided to Makerry. Union added that this was an incentive for it to minimize the impact on any landowner, but that it was only one of many considerations to be taken into account.

- 4.4.7 Union submitted that expropriation of lands along the Phase I route is a possibility, but not a certainty, in very few cases. Union added that outstanding disputes would likely be resolved by compensation.
- 4.4.8 Union's witnesses testified that communication channels are in place through which landowners have access to a senior project manager during construction. However, Union acknowledged that these channels, which rely in part on replies to call-back messages could, on occasion, result in delays in excess of 24 hours before a landowner's complaint reaches a senior decision maker. Union further acknowledged that such a delay would negate a landowner's ability to appeal field decisions, such as whether to halt construction during wet weather conditions.

- 4.4.9 Regarding the lands affected by the Kirkwall-Hamilton Loop, the Board observes that landowner concerns, other than those raised by Makerry and those related to compensation matters, appear to have been accommodated.
- 4.4.10 With regard to the easement on Makerry's land, the Board finds that both Union's preferred route and the southern route proposed by

Makerry are within the same general location. The Board, therefore, finds that it need not rule on the selection of the specific route across the Makerry property, and that this is better left for resolution between Union and Makerry.

- 4.4.11 The Board accepts Union's expert's assessment that the choice of either route on the Makerry property will not significantly change the environmental impacts on neighbouring lands.
- 4.4.12 The Board finds that Union's current system of communicating with landowners during construction should be improved. The Board directs Union, as a condition of approval, to establish a procedure whereby landowners can be reasonably guaranteed rapid access to a senior manager at times when they feel a field representative has made an inappropriate decision.
- 4.4.13 The Board further directs Union to maintain a written log of all landowner complaints during construction. This log shall record the time the complaint is initially received; the substance of the complaint; when a final decision was made; the reasons for the decision; and when the landowner was informed of the action to be taken in response to the complaint. The Board requires Union to append these records as part of its interim and final monitoring

reports. (Ref Appendix B, conditions "g, h, i, n and o").

4.5.0 ENVIRONMENTAL ISSUES

- 4.5.1 Union retained two consulting firms to assess the environmental impacts of constructing the proposed loops and filed four environmental reports in support of the Application.
- 4.5.2 The consultants retained by the Applicant endorsed Union's preferred route and indicated that, with their recommended mitigation measures, environmental impacts could be kept to an acceptable level.
- 4.5.3 Union, therefore, submitted that the proposed construction would not have any significant permanent impact on the environment. Union claimed that its construction practices were state of the art, and that unavoidable impacts would be minimized.

The Board's Findings

4.5.4 The Board accepts Union's evidence on environmental impact, and is satisfied that, providing the mitigation measures described in Union's evidence and testimony are implemented, the construction of the proposed Kirkwall-Hamilton Loop will not cause intolerable disruptions or significant lasting detriment to the environment.

4.6.0 OPERATIONAL SAFETY

- 4.6.1 Union's proposed pipeline loop is subject to Ontario Regulations No. 450/88 and 627/87 which govern the design, installation, inspection, testing and safety aspects of the operation and maintenance of natural gas pipelines in Ontario. Adherence to the regulations is enforced by the Fuels Safety Branch of the Ministry of Consumer and Commercial Relations ("the FSB").
- 4.6.2 Union informed the Board that discussions regarding revisions to the FSB's <u>Guidelines for Development in the Vicinity of Natural Gas Pipeline Facilities and for Natural Gas Utilities Locating New Facilities</u> ("the FSB Guidelines"), had been essentially concluded between the FSB, Union, Consumers Gas and ICG.
- 4.6.3 At the time of the hearing, the FSB Guidelines recommend a 20 metre setback from the centre line of a pipeline to the nearest dwelling when a transmission line operates at a stress level

above 30 percent of the specified minimum yield stress. The revisions to the FSB Guidelines, which had not yet been formally adopted by the FSB, were expected to recommend a minimum 5 metre setback from the centre line of a pipeline to the nearest dwelling as being acceptable when a 20 metre setback cannot be reasonably maintained. In addition to a minimum setback of 5 metres, the revisions would reportedly require the implementation of one of the following measures:

- the use of Class-2 pipe;
- a minimum cover of at least 1.5 metres over the pipeline; and/or
- the placement of concrete slabs over the pipeline.
- 4.6.4 Union expressed confidence that these revisions to the FSB Guidelines would be adopted prior to the construction of the proposed facilities.
- 4.6.5 Union indicated that the Kirkwall-Hamilton Loop would be located primarily in Class-1 locations.

 The exception was in the vicinity of the Ponderosa Nature Park, which is a Class-2 location.
- 4.6.6 Union indicated that it would design its pipeline to Class-3 standards, which require

thicker walled pipe, in specific areas along the Kirkwall-Hamilton Loop where future development was expected to occur.

- 4.6.7 There is one location on the Kirkwall-Hamilton Loop where the centre line of the proposed pipeline would be closer than 20 metres from a dwelling. On Lot 34, Concession VII, in the Town of Flamborough, a summer cottage is located 4 metres from the proposed centre line of the Kirkwall-Hamilton Loop.
- 4.6.8 Union stated that plans are underway to relocate the summer cottage away from the Kirkwall-Hamilton Loop, or alternatively find another cottage acceptable to the occupant. Union expressed confidence that an arrangement that respects the FSB Guidelines will be implemented.

- 4.6.9 The Board approves Union's proposed construction procedures and endorses its pipe class selections.
- 4.6.10 The Board is satisfied that adoption of the revised FSB Guidelines is sufficiently assured to allow them to be expected to govern the construction and location of the proposed pipeline.

4.6.11 However, the Board still requires that Union shall comply with the FSB Guidelines in effect at the time it constructs facilities, and that Union shall obtain such waivers as may be required by the FSB.



5.0.0 CONCLUSION OF PHASE I

5.1.0 THE BOARD'S APPROVAL

- 5.1.1 The Board finds that the construction of the proposed pipeline is in the public interest.
- 5.1.2 Subject to Union's compliance with the conditions specified in Appendix B, the Board grants Union leave to construct the Kirkwall-Hamilton Loop as proposed. The Board will, in due course, issue its Order to this effect.
- 5.1.3 The Board approves the form of the agreement which Union proposes to offer to each landowner for easements on those properties upon which the Kirkwall-Hamilton Loop is to be constructed.

5.2.0. CONDITIONS OF APPROVAL

5.2.1 Board Staff proposed a list of conditions of approval, (shown as conditions "a" through "l"

in Appendix B), for consideration in the event that leave to construct is granted. These conditions, subject to two exceptions, were acceptable to Union.

- 5.2.2 Firstly, prior to the adjournment of the Phase I hearing, Union submitted that leave to construct orders should be granted with an added condition that it file, with the Board, transportation contracts confirming firm contract demands prior to constructing the applied-for facilities.
- 5.2.3 Secondly, Board Staff proposed the condition:
 "The Leave to Construct granted herein terminates December 31, 1990". Union suggested it be changed to read:

Unless the Board otherwise directs, Union shall cause the construction and installation of the additional facilities to be commenced on, or before, December 31, 1990.

In argument, Board Staff proposed two conditions requiring Union to: (1) file with the Board a list of all American and Canadian regulatory approvals required to allow the shipment of the forecasted threshold volumes; and (2) verify to the Board that all the necessary regulatory approvals have been obtained, to support the threshold volumes cited by Union, before commencing construction of approved loops.

- 5.2.5 The Board finds that the conditions of approval proposed by Board Staff, and agreed to by Union, are appropriate and shall be included in the Board order granting leave to construct facilities approved in this phase of the proceedings (Appendix B, conditions "a" through "k").
- 5.2.6 The Board is of the opinion that conditioning its approval on the commencement date for construction would be too vague, in that protracted construction schedules could result in the Board's approval extending to a time when circumstances might have undergone substantial changes. The Board, therefore, rejects Union's proposal with regard to condition "1" in Appendix B.
- 5.2.7 The Board recognizes that these proceedings have now been prolonged beyond the time initially envisioned by Union. However, given Union's revised proposal to construct only the Kirkwall-Hamilton Loop during the 1990 construction season, the Board finds that the termination date proposed by Board Staff, is appropriate.

- 5.2.8 The Board, therefore, finds that leave to construct the Kirkwall-Hamilton Loop shall terminate on December 31, 1990, unless otherwise ordered by the Board, (Ref Appendix B, condition "l").
- The Board rejects Board Staff's recommendation that approval should be granted with the condition that Union provide a list of the required regulatory approvals. The Board finds that it is appropriate and sufficient to require Union to verify that all necessary regulatory and government approvals have been obtained prior to commencing construction, (Ref Appendix B condition "m"). The onus is on Union to assure that all the necessary approvals have been secured when it provides the required verification.
- 5.2.10 For the reasons given herein, the Board finds that it is appropriate to condition approval on Union's having corrected the cited shortcoming in its method of communicating with landowners, as required in Appendix B, condition "n", prior to commencing construction.
- 5.2.11 The Board requires Union to expand its interim and final monitoring reports, as required in Appendix B, condition "o", to include reports of all landowner complaints during construction,

and to issue copies of the monitoring reports to all affected landowners.

5.3.0 COSTS

5.3.1 Section 28 of the Act empowers the Board to award costs, and the Board's June 12, 1985 Report E.B.O. 116 sets out the considerations by which the Board will be guided, as a general rule, in the exercise of its discretion to award costs to intervenors.

- 5.3.2 It is customary for the Board to consider awarding costs at the completion of a hearing. As this proceeding had been separated into two distinct phases, the Board finds that it is appropriate to award costs now to those intervenors that have actively participated in the Phase I hearing, and can be expected to have, at most, only minimal participation in Phase II of these proceedings.
- 5.3.3 In consideration of the contributions by such parties, the Board makes the following findings:
 - o Makerry shall be awarded 70 percent of its reasonably incurred costs in this phase of the proceedings, after assessment by the

Board's Assessment Officer. The Board instructs Makerry to provide an accounting of its incurred costs to the Board Secretary within 14 days of its receipt of this Decision with Reasons.

- O The Board awards the Kirkwall-Hamilton Committee an honorarium in the amount of six hundred dollars to be paid by Union forthwith upon its receipt of this Decision with Reasons.
- 5.3.4 The Board will, in due course, issue its cost order with regard to Makerry, and instructs Union to pay the award to Makerry forthwith upon receipt of said order.
- 5.3.5 Should Makerry or the Kirkwall-Hamilton Committee further participate in these proceedings, the Board will consider what, if any, further cost awards or honoraria should be granted at the conclusion of Phase II of these proceedings.

5.3.6 The Board's costs, and those of other eligible intervenors, will be dealt with the conclusion of Phase II of these proceedings.

DATED AT Toronto this 1st day of March, 1990.

Ocid. Cook

Presiding Member

C.A. Wolf Jr.

Member

V.W. Bielski, Q.C.

Member



APPENDIX A

E.B.L.O. 234 ISSUES LIST

- Need for proposed facilities expansion demand for transportation on Union's Dawn-Trafalgar System and other forecast requirements:
 - Storage and sales customers' demand;
 - Transportation demand and delivery points;
 - Timing and certainty of demand.
- Economic feasibility of proposed facilities (Stages
 1, 2 and 3) and the ability to recover System expansion costs.
- 3. Feasibility of the proposed project and the routing alternatives based on economic, environmental, security of supply and system design comparisons.
- 4. Operational safety of the Dawn-Trafalgar pipeline system.
- 5. Selecting the optimum System design options for meeting demand in the event Union's forecasted demand does not materialize:
 - Staging of construction;



- Additional compression;
- The need for loss of critical unit compression.
- 6. Environmental impact of construction restoration of lands - forms of compensation (crop loss, easement, fee simple).
- 7. Impact of constructing additional loopings on properties which have between two and five existing major pipelines impact saturation; and impact of constructing alternatives.
- 8. Does Union's present application predetermine the location for future loopings on the Dawn-Trafalgar System?
- 9. Definition of Public Interest.
- 10. Cost Awards.



APPENDIX B

E.B.L.O. 234 CONDITIONS OF APPROVAL

KIRKWALL-HAMILTON LOOP

- a) Subject to Condition (b), Union shall comply with all undertakings made by its counsel and witnesses, and shall construct the pipeline and shall restore the land according to the evidence of its witnesses at this hearing.
- b) Union shall advise the Board's designated representative of any proposed change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the Board's designated representative. In the event of an emergency, the Board's designated representative shall be informed forthwith after the fact.
- c) Union shall furnish the Board's designated representative with every reasonable facility for ascertaining whether the work has been, and is being, performed according to the Board's Order.
- d) Union shall give the Board's designated representative and the Chairman of the Ontario Pipeline Coordinating Committee 10 days written



notice of the commencement of construction of the pipeline.

- e) Union shall designate one of its employees as project engineer who will be responsible for the fulfillment of conditions and undertakings on the construction site. Union shall provide the name of the project engineer to the Board's designated representative. Union shall prepare a list of the undertakings given by its witnesses during the hearing and will provide it to the Board's designated representative for verification and to the project engineer for compliance during construction.
- f) Union shall file with the Board's designated representative notice of the date on which the installed pipeline is tested within one month after the test date.
- monitor the effects upon the land and the environment, and shall file ten copies of both an interim and a final monitoring report with the Board's designated representative and simultaneously provide a copy of each report to every landowner on the pipeline route. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report within 15 months of the in-service date.

- h) The interim report shall describe the implementation of Conditions (a) and (b), if any, and shall include a description of the effects noted during construction and the actions taken or to be taken to prevent or mitigate any long-term effects of the construction upon the environment. This report shall describe any outstanding concerns of landowners.
- i) The final monitoring report shall describe the condition of the rehabilitated right-of-way and actions taken subsequent to the interim report. The results of the monitoring programs and analysis shall be included, and recommendations made as appropriate. Further, the final report shall include a breakdown of external costs incurred to date for the authorized project with items of cost associated with particular environmental measures delineated and identified as pre-construction related, construction related and restoration related. Any deficiency in compliance with undertakings shall be explained.
- j) Union shall file with the Board's designated representative "as-built" drawings of the pipeline; such drawings shall indicate any changes in route alignment.
- k) Within 12 months of the in-service date, Union shall file with the Board's designated representative a Post Construction Financial

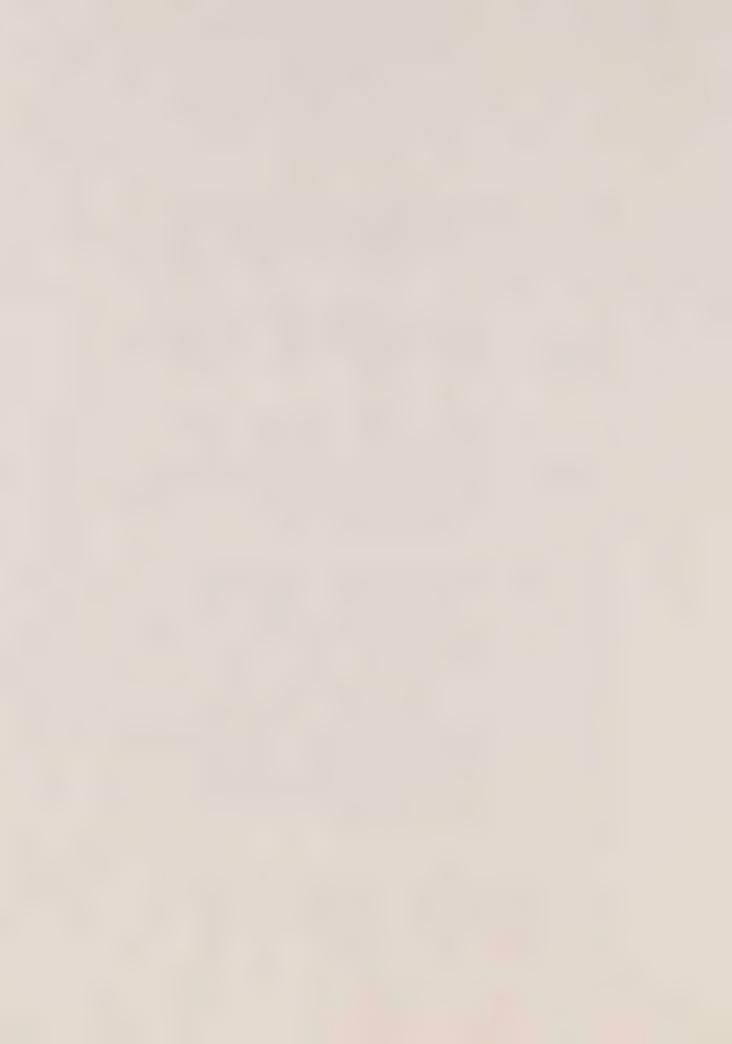


Report. The Report shall indicate the actual capital costs of the project and shall explain all significant variances from the estimates adduced in the hearing.

- 1) The Leave to Construct granted herein terminates

 December 31, 1990, unless otherwise ordered by the

 Board.
- m) Union shall verify, in writing, to the Board Secretary that all necessary regulatory and government approvals have been obtained before commencing construction of the facilities for which leave to construct has been granted.
- n) Union shall define a communication procedure which can reasonably guarantee that landowners will have rapid access to a senior manager at all times when there is a dispute over the construction decisions of Union's field representatives. Approval of the procedure by a quorum of the Board shall be obtained, and a clear written description, including contact names and the steps to be taken shall be approved by the Board's designated representative and provided to all affected landowners prior to commencing construction of the pipeline.
- o) Union shall append to its interim and final monitoring reports a log of all landowner complaints that have been received during



construction. Such logs shall record the times of all complaint-related communications between Union and the landowners; the substance of each complaint; the actions taken in response; and the reasons underlying such actions.

p) The Board's designated representative for the purposes of these conditions shall be The Board's Project Manager, Environmental.

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